

## UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO. 09/841,582

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Kazuo Nishiyama

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08/27/2003

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EXAMINER

CRUZ, LOURDES C

ART UNIT

PAPER NUMBER

2827

DATE MAILED: 08/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary		Application No.	Applicant(s)	
		09/841,582	NISHIYAMA ET AL.	
		Examiner	Art Unit	
		Lourdes C. Cruz	2827	
The MAILING DATE of this communication app ars on the cover sheet with the correspondence address Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status				
1)[	Responsive to communication(s) filed on <u>06 M</u>	<u>lay 2003</u> .		
2a)⊠	This action is <b>FINAL</b> . 2b) ☐ This	s action is non-final.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. <b>Disposition of Claims</b>				
4)⊠	Claim(s) 1-20 is/are pending in the application.			
	4a) Of the above claim(s) 10-20 is/are withdrawn from consideration.			
	Claim(s) is/are allowed.			
6)⊠	Claim(s) <u>1-9</u> is/are rejected.			
7)	Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/or election requirement.  Application Papers				
9) The specification is objected to by the Examiner.				
10)⊠ The drawing(s) filed on <u>11 March 2003</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).				
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.				
If approved, corrected drawings are required in reply to this Office action.				
12)☐ The oath or declaration is objected to by the Examiner.				
Priority under 35 U.S.C. §§ 119 and 120				
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).				
a)[	☑ All b)☐ Some * c)☐ None of:			
	1. Certified copies of the priority documents	have been received.		
	2. Certified copies of the priority documents	have been received in Applicatio	n No	
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>				
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).				
a) ☐ The translation of the foreign language provisional application has been received.  15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.				
Attachment(s)				
2) 🔲 Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) eation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal Pa	PTO-413) Paper No(s) stent Application (PTO-152)	

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in-
- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Corisis et al. (US 5956236).

Corisis et al. discloses an electronic component (See Fig. 5 and 6) comprising:

At least one chip 12 (see multiple chips 12) having at least its electrodes (underneath 16, connected to 16) formed exclusively on one surface thereof, and surfaces other than said one surface being continuously covered with a protective material 14b.

Corisis et al also discloses the above electronic component wherein:

 Said protective material comprises an organic resin or an inorganic insulating material (Col. 3, lines 50+) Application/Control Number: 09/841,582

Art Unit: 2827

A semiconductor chip 12 mounted on a package substrate 10, the

electrode formed on a device surface of the chip, and both a side

wall and a bottom surface of the chip are covered with the

protective material

Chips bonded to each other

Chips bonded by said protective material and a solder bump 16 on

the electrodes, the electrodes formed solely on one surface of the

chip and wherein interspaces and bottom surfaces of the chips are

continuously covered by the protective material

A Chip array

Regarding claims 3, and 8:

A "product by process" claim is directed to the product per se, no matter how

actually made, In re Brown, 173 USPQ 685; In re Luck, 177 USPQ 523; In re

Fessmann, 180 USPQ 324; In re Avery, 186 USPQ 161; In re Wertheim, 191 USPQ 90

(209 USPQ 554 does not deal with this issue); In re Marosi et al, 218 USPQ 289; and

particularly In re Thorpe, 227 USPQ 964, all of which make it clear that it is the

patentability of the final product per se which must be determined in a "product by

process" claim, and not the patentability of the process, and that an old or obvious

product produced by a new method is not patentable as a product, whether claimed in

"product by process" claims or not. Note that applicant has the burden of proof in such

cases, as the above case law makes clear.

Page 3

Applicant's arguments filed 03/11/2003 have been fully considered but they are

not persuasive. Applicant argues that:

• On page 4 of the remarks, lines 3-10, applicant argues wafer

processing and other process related issues such as manufacturing

cost.

Package 12 is not covered by a protective material

Only portions of the sidewalls are secured with protective material

The above are not persuasive because:

Processing steps, as discussed in the body of the rejection, have

no patentable weight when the patentability of a device itself is

being sought after. See "product by process" remarks above.

· Package 12 is covered by 14b, which reads on the claimed

"protective material" in as much as such "protective material" has

been defined in the claims such that no other material would read

on the claimed "protective material"

Applicant failed to specifically point out why the present Application

specifically requires that a protective material secures more than

portions of the sidewalls. The examiner is unable to specifically

ascertain what the scope of Applicant's remarks is. However, the

examiner will like to point out that protective material entirely covering sidewalls is not claimed. See that the protective material of the prior art is continuous.

The above new grounds of rejection are due to amendments to the claims.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elle Cruz whose telephone number is 703-306-5691. The examiner can normally be reached on M-F 10-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Talbott can be reached on 703-305-9883. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Application/Control Number: 09/841,582

Art Unit: 2827

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-

0956.

Elle Cruz

August 13, 2003

Lourdes C. Cruz Examiner Art Unit 2827

John S. V

Page 6

GAU 2827